# Form factors for two-nucleon transfer in the diabolical region of rotating nuclei

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The theoretical investigation of rotational bands in strongly deformed nuclei by Coulomb excitation and the subsequent transfer of nucleon pairs requires the knowledge of two-nucleon transfer amplitudes between rotating eigenstates of the A and the A+or-2 systems. In a semi-classical approximation these amplitudes are obtained by integrating over transfer form factors depending on the orientation angle of the deformed target nucleus. We use the cranking approximation based on a rotating mean field in order to calculate these transfer form factors. Their behavior is studied as a function of angular momentum, deformation and pairing correlations. In the region of diabolical points these form factors show considerable oscillations and phase changes reflecting the microscopic single-particle structure involved in these matrix elements. In this way we are able to understand the underlying microscopic structure causing the diabolical behavior of pair transfer in this region.

## References

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